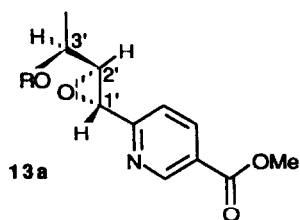


C. André-Barrès, Y. Langlois* and M. Gomez-Pacios

Tetrahedron: Asymmetry 1990, 1, 571



$$[\alpha]_D^{22} = -30.3 \text{ (c 1.37, CHCl}_3\text{)}$$

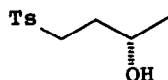
Source of chirality :
(S)-(-)-ethyl lactate

R = Si*t*BuMe₂
C₁₇H₂₇NO₄

Absolute configuration 1'R 2'S 3'S

Rafael Chinchilla, Carmen Nájera, José Pardo, and Miguel Yus

Tetrahedron: Asymmetry 1990, 1, 575



C₁₁H₁₆O₃S
1-Tosylbutan-3-ol

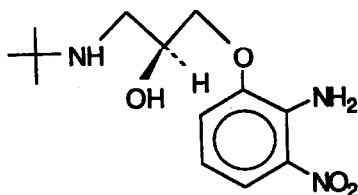
$$[\alpha]_D^{25} +20.1 \text{ (c 1.92, CHCl}_3\text{)}$$

E.e. = 100% [prepared from optically pure (S)-methyloxirane (*Tetrahedron*, 1988, 44, 6325)]

Absolute configuration: S

A. HAMMADI, C. CROUZEL

Tetrahedron: Asymmetry 1990, 1, 579



(S)-(+)-1-(2-amino-3-nitrophenoxy)-
3-(tert-butylamino)-2-propanol

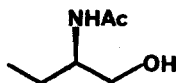
E.e. = 92% (by polarimetry with ref. to $[\alpha]_D^{20} = +22.5$ (c= 1.2, MeOH))

Source of chirality : (S)-(+)-Glycidyl tosylate

Absolute configuration : S

H. S. Bevinakatti and R. V. Newadkar

Tetrahedron: Asymmetry 1990, 1, 583



C₆H₁₃NO₂
N-Acetyl-2-amino-1-butanol

E.e. = 100%

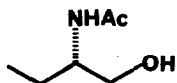
$$[\alpha]_D^{25} = +44.5 \text{ (c 5, EtOH)}$$

Source of chirality: (R)-2-amino-1-butanol

Absolute configuration : R

H. S. Bevinakatti and R. V. Newadkar

Tetrahedron: Asymmetry 1990, 1, 583



E.e. = 100%

$[\alpha]_D^{25} = -43.9$ (5, EtOH)

Source of chirality: (S)-2-amino-1-butanol

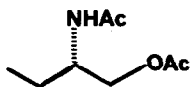
$C_6H_{13}NO_2$

N-Acetyl-2-amino-1-butanol

Absolute configuration : S

H. S. Bevinakatti and R. V. Newadkar

Tetrahedron: Asymmetry 1990, 1, 583



E.e. = 100%

$[\alpha]_D^{25} = -48.9$ (6, EtOH)

Source of chirality: (S)-2-amino-1-butanol and lipase-catalysed kinetic resolution.

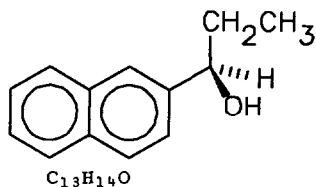
$C_6H_{15}NO_3$

N,O-Diacetyl-2-amino-1-butanol

Absolute configuration : S

C. Rosini, L. Franzini, D. Pini, P. Salvadori

Tetrahedron: Asymmetry 1990, 1, 587



$C_{13}H_{14}O$

(R)-1-hydroxy-1-(2-naphthyl)propane

$[\alpha]_D^{22} = +27$ (c=0.74, CH_2Cl_2)

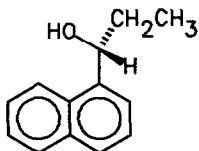
e.e.=72% [by HPLC on Pirkle ionic DNBPG]

R configuration from elution order upon the same CSP.

1H -NMR: δ =8.0÷7.4 (m, 7H, ar), 4.8 (dd, 1H, CH), 2.1 (s, 1H, OH), 1.8 (m, 2H, CH_2), 0.9 (t, 3H, CH_3)

C. Rosini, L. Franzini, D. Pini, P. Salvadori

Tetrahedron: Asymmetry 1990, 1, 587



$C_{13}H_{14}O$

(R)-1-hydroxy-1-(1-naphthyl)propane

$[\alpha]_D^{22} = +25.8$ (c=1, $CHCl_3$)

e.e.=48% [by HPLC on Pirkle ionic DNBPG]

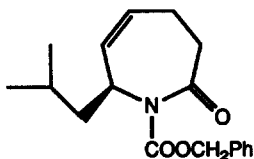
R configuration from elution order upon the same CSP.

1H -NMR: δ =8.2÷7.4 (m, 7H, ar), 5.4 (dd, 1H, CH), 2.1÷1.8 (m, 2H, CH_2), 1.0 (t, 3H, CH_3)

C₁₅H₁₄3-Phenylethynyltricyclo-[2.2.1.0^{2,6}]-heptane

E.e. = 59.8 % [by GC analysis on a 40 m perpentylated cyclo-dextrin column of the trifluoroacetate of 3-hydroxymethyl-tricyclo[2.2.1.0^{2,6}]heptane, obtained by degradation]
 $[\alpha]_D = +50.4$ ($c = 1.0$, CHCl₃, 25°C)
 Source of chirality: (-)-Norphos in the catalyst [Rh(nbd)(-)-Norphos]PF₆

Absolute configuration: unknown



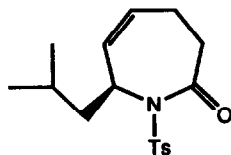
Homochiral as determined by assay on degradation product

 $[\alpha]_D^{20} = +223.9$ (c 1.64, MeOH)

Source of chirality: 2(S)-leucine

Absolute configuration: 7(S)

7(S)-isobutyl-N-benzyloxycarbonyl-1,7,3,4-tetrahydro-2H-azepin-2-one



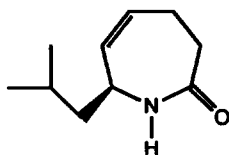
Homochiral as determined by assay on degradation product

 $[\alpha]_D^{20} = +128.1$ (c 1.65, MeOH)

Source of chirality: 2(S)-leucine

Absolute configuration: 7(S)

7(S)-isobutyl-N-toluenesulfonyl-1,7,3,4-tetrahydro-2H-azepin-2-one



Homochiral as determined by assay on degradation product

 $[\alpha]_D^{20} = +15.8$ (c 1.38, MeOH)

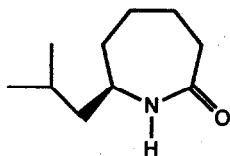
Source of chirality: 2(S)-leucine

Absolute configuration: 7(S)

7(S)-isobutyl-1,7,3,4-tetrahydro-2H-azepin-2-one

P. A. Evans, A. B. Holmes,* and K. Russell

Tetrahedron: Asymmetry 1990, 1, 593



Homochiral as determined by assay on degradation product

$[\alpha]_D^{20} = -9.3$ (*c* 0.53, MeOH)

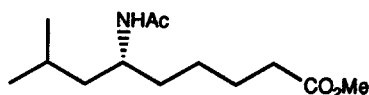
Source of chirality: 2(*S*)-leucine

Absolute configuration: 7(*R*)

7(*R*)-isobutylhexahydro-azepin-2-one

P. A. Evans, A. B. Holmes,* and K. Russell

Tetrahedron: Asymmetry 1990, 1, 593



E.e $\geq 95\%$ [^1H N.M.R. using (+)-Eu(hfc) $_3$]

$[\alpha]_D^{20} = -24.9$ (*c* 1.02, MeOH)

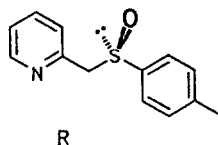
Source of chirality: 2(*S*)-leucine

Absolute configuration: 6(*R*)

Methyl 8-methyl-6(*R*)-acetamido-nonanoate

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597.



ee = 100%

$[\alpha]_D^{22} = +274$ (*c* = 1, acetone)

Source of chirality: (*S*)-(-)-[(1*R*)-Menthyl]-*p*-toluenesulfinate

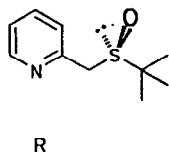
Abs. configuration: R (inversion during substitution at sulfur of the sulfinate)

C $_{13}$ H $_{13}$ NOS

2-[(4-Methylphenyl)sulfinylmethyl]pyridine

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597



ee = 100%

$[\alpha]_D^{22} = +304$ (*c* = 1.2, acetone)

Source of chirality: an opt. pure *t*-butyl sulfinate

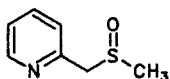
Abs. configuration: R (inversion during substitution at sulfur of the sulfinate)

C $_{10}$ H $_{15}$ NOS

2-(*t*-Butylsulfinylmethyl)pyridine

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597



ee ≈ 25% (¹H NMR; shift reagent Eu(hfc)₃)
[α]_D²² = -25 (c = 4, acetone)

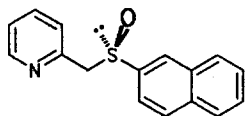
Source of chirality: oxidation with Ti/(+)-DET-catalyst

C₇H₉NOS

2-(Methylsulfinylmethyl)pyridine

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597



R

C₁₆H₁₃NOS

2-(2-Naphthylsulfinylmethyl)pyridine

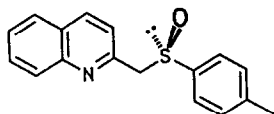
ee ≈ 93% (¹H NMR; shift reagent Eu(hfc)₃)
[α]_D²² = +241 (c = 0.7, acetone)

Source of chirality: (R)-(+)-2-(methylsulfinyl)-naphthalene (94% ee)

Abs. configuration: R (configuration at sulfur maintained during the synthesis)

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597



R

C₁₇H₁₅NOS

2-[(4-Methylphenyl)sulfinylmethyl]quinoline

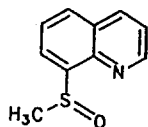
ee = 100%
[α]_D²² = +149 (c = 1.3, acetone)

Source of chirality: (S)-(-)-[(1R)-Menthyl]-p-toluenesulfinate

Abs. configuration: R (inversion during substitution at sulfur of the sulfinate)

K.-U. Baldenius and H. B. Kagan

Tetrahedron: Asymmetry 1990, 1, 597



C₁₀H₉NOS

8-(Methylsulfinyl)quinoline

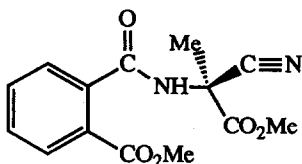
ee = 100%
[α]_D²² = +526 (c = 0.6, acetone)

Source of chirality: oxidation with Ti/(+)-DET-catalyst

Abs. configuration: R (assigned by analogy to other asym. sulfide oxidations)

P. Hudhomme, L. Toupet and G. Duguay*

Tetrahedron: Asymmetry 1990, 1, 611

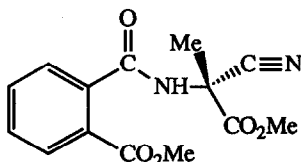


Source of chirality : (-)-(S)-Ethyl Lactate
[α]_D -9.85 (c = 0.8 AcOEt)
Absolute configuration : S
(assigned by X-Ray of resolved intermed. diastereo.)

(S)-Methyl 2-cyano-2-o-methoxycarbonylbenzamido propanoate

P. Hudhomme, L. Toupet and G. Duguay*

Tetrahedron: Asymmetry 1990, 1, 611

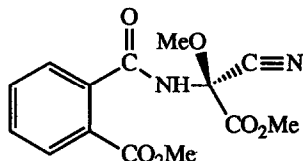


Source of chirality : (-)-(S)-Ethyl Lactate
[α]_D +10 (c = 0.8 AcOEt)
Absolute configuration : R
(assigned by X-Ray of resolved intermed. diastereo.)

(R)-Methyl 2-cyano-2-o-methoxycarbonylbenzamido propanoate

P. Hudhomme, L. Toupet and G. Duguay*

Tetrahedron: Asymmetry 1990, 1, 611

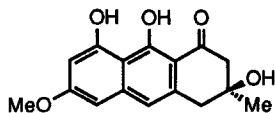


Source of chirality : (-)-(S)-Ethyl Lactate
[α]_D -17 (c = 1 Et OH)
Absolute configuration : S
(assigned by X-Ray of resolved intermed. diastereo.)

(S)-Methyl 2-cyano-2-methoxy-2-o-methoxycarbonylbenzamido ethanoate

M. Gill, A. Giménez, A.G. Jhingran and A.R. Palfreyman

Tetrahedron: Asymmetry 1990, 1, 621



C₁₆H₁₆O₅
Torosachryson

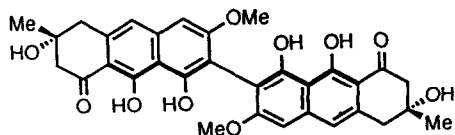
[α]_D³⁴ = +7.2 (c 1.7, dioxane), -6.0 (c 0.65, MeOH)
CD: 295 ($\Delta\epsilon$ -0.52), 310 (-0.28), 340 nm (-0.82) (MeOH).

Source of chirality: natural (fungal metabolite).

Absolute configuration: 3S (assigned by chemical correlation with synth. reference).

M. Gill, A. Giménez, A.G. Jhingran and A.R. Palfreyman

Tetrahedron: Asymmetry 1990, 1, 621



$C_{32}H_{30}O_{10}$

Flavomannin-6,6'-di-O-methyl ether A₁

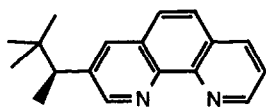
$[\alpha]_{D}^{22} = -853$ (c 0.20, $CHCl_3$)

CD: 287 ($\Delta\epsilon$ -68.25), 265 nm (+ 72.39) (MeOH).

Source of chirality: natural (fungal metabolite).

Absolute configuration: 3*R*, 3'*R*, atrop-*R* (central stereochemistry assigned by chemical correlation with synth. reference).

S. Gladiali, L. Pinna, G. Delogu, S. De Martin,
G. Zassinovich and G. Mestroni



$C_{18}H_{20}N_2$

(-)-(S)-3-(1,2,2-Trimethylpropyl)-1,10-phenanthroline

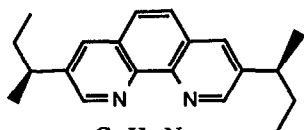
E.e. = 92% based on the e.e. of the starting product

$[\alpha]_{D}^{25} = -7.4$ (c 1, EtOH 95%)

Source of chirality: (+)-(R)-3,4,4-Trimethylpentanoic acid from optical resolution.

Tetrahedron: Asymmetry 1990, 1, 635

S. Gladiali, L. Pinna, G. Delogu, S. De Martin,
G. Zassinovich and G. Mestroni



$C_{20}H_{24}N_2$

(+)-(S,S)-3,8-Di-sec.butyl-1,10-phenanthroline

E.e. = 96% based on the e.e. of the starting product

$[a]_{D}^{25} = +40.2$ (c 1, EtOH 95%)

Source of chirality: natural (-)-(S)-2-Methyl-1-butanol

Tetrahedron: Asymmetry 1990, 1, 635